

hardiness zone 3. Growing season in frost free days 120. Soil texture silty to clay.

The following were developed by Robert Busch, USDA, ARS, University of Minnesota, Dept. of Agronomy & Plant Genetics, St. Paul, Minnesota 55108, United States; Ian B. Edwards, Pioneer Overseas Corporation, 6800 Pioneer Parkway, Box 316, Johnston, Iowa 50131, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; D.D. Warnes, University of Minnesota, Morris, Minnesota 56267, United States; G. Hareland, USDA, ARS, Fargo, North Dakota 58105, United States; R.D. Wilcoxson, University of Minnesota, Dept. of Plant Pathology, St. Paul, Minnesota 55108, United States; Jochum Wiersma, University of Minnesota, Northwest Experiment Station, 108 Agricultural Research Center, Crookston, Minnesota 56716, United States; G. Linkert, University of Minnesota, St. Paul, Minnesota 55108, United States; R. Dill-Macky, University of Minnesota, St. Paul, Minnesota 55108, United States; H. Schmidt, Pioneer Hi-Bred International, Moorhead, Minnesota 56500, United States. Received 02/03/1997.

**PI 596533. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "BAC UP"; MN2535. CV-854. Pedigree - Nuy Bay/Pioneer 2375//Marshall. Hard red spring wheat. Resistant to Fusarium Head Blight (scab). Lower yielding and recommended to be used on up to 15% of acreage where scab is expected to be a problem. Exhibits highest grain volume weight and highest protein content of all spring wheat cultivars. Plant height medium, early to head. Exhibits severe leaf tip burn associated with Lr34. Resistant to leaf and stem rust. Resistant to shattering. Gliadin profile similar to Pioneer 2375. Resistant to several types of scab and its spread in the spike. Kernel resistance to shriveling.

The following were developed by Jose Fernandez-Martinez, Instituto de Agricultura Sostenible, Alameda del Obispo s/n, Apartado 4084, Cordoba, Spain; Juan Dominguez, Agriresearch Center C.I.F.A., Finca Alameda del Obispo, P.O. Box 4240, Cordoba, Spain; A. De Haro, Instituto de Agricultura Sostenible, CSIC, Apartado 4084, Cordoba, Cordoba 14080, Spain; R. Garcia-Ruiz, Centro de Investigacion y Desarrollo Agrario (CIDA), Dept. of Breeding and Agronomy, Junta de Andalucia, Cordoba, Cordoba 14080, Spain; L. Velasco, Instituto de Agricultura Sostenible, Apartado 4084, Cordoba, Cordoba 14080, Spain; M. del Rio, Centro de Investigacion y Desarrollo Agrario (CIDA), Dept. of Breeding and Agronomy, Junta de Andalucia, Cordoba, Cordoba, Spain; J. Munoz, Instituto de Agricultura Sostenible, Apartado 4084, Cordoba, Cordoba 14080, Spain. Donated by Jose Fernandez-Martinez, Instituto de Agricultura Sostenible, Alameda del Obispo s/n, Apartado 4084, Cordoba, Spain. Received 02/03/1997.

**PI 596534. *Brassica carinata* A. Braun**

Breeding. BC-853-1. GP-14. Pedigree - Selection from UC77-1309. High yielding line under southern Spain rainfed conditions with average 64% more seed yield than Canola check cultivars. High resistance to pod shattering. High erucic acid, seed oil 468 g Kg-1, and low glucosinolate 98 umol g-1. Seed yellow to brown, average 1000-seed weight 3.4 g, seed oil and protein contents 468 g Kg-1 and 242 g Kg-1 respectively.